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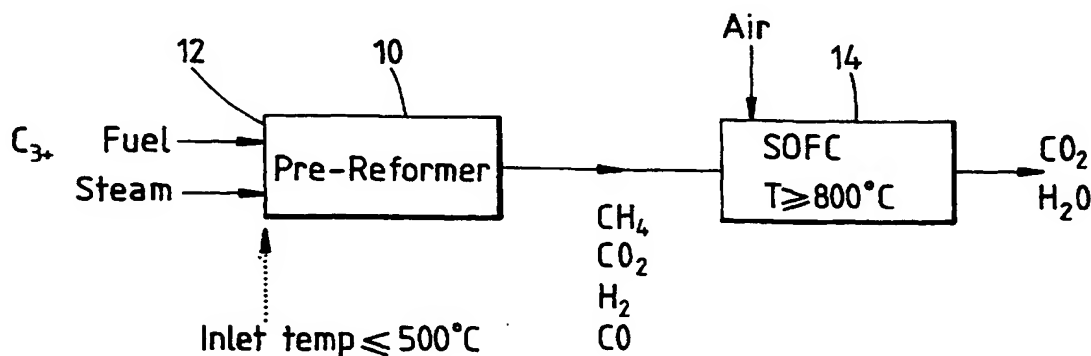
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(54) Title: FUEL CELL SYSTEM



(57) Abstract: A process for producing electricity in a fuel cell (14) which comprises reacting a higher carbon (C₂₊) hydrocarbon fuel with steam in a steam pre-reformer (10) at a temperature in the pre-reformer of no greater than 500 °C to produce a fuel stream including hydrogen and no less than about 20 % by volume methane measured on a wet basis, and supplying the fuel stream and an oxidant to a high temperature fuel cell (14) in which the methane is reformed and electricity is produced by reacting the fuel stream at an anode of the fuel cell and reacting the oxidant at a cathode of the fuel cell.